AUTOMOTIVE NEWS

WONDERS OF AUTO WORLD IN GRAND DISPLAY SATURDAY

Many New Features to Mark 20th Annual Passenger and Truck Shows in New York.

New York is accustomed to superlative things, but even cosmopolitan New York will be amazed, next Saturday afternoon, when it gets its first look at the passenger car division of the twentieth annual National Automobile Show, the greatest ever held, spread out in gleaming, colorful ranks on four full floors of Grand Central Palace.

Smartly artistic decorations will give the big show a fitting setting for the inspection by hundreds of New Yorkers and thousands of out-of-town visitors while simultaneously in the Eighth Coast Artillery Armory, at Jerome avenue, Kingsbridge road and 194th street, the biggest motor truck show in automotive history, throws open to the public the doors of the country's largest armory displaying 180,000 square feet of concrete floor covered with motor trucks and accessories.

Either one of these two shows which celebrate the twentieth anniversary of the industry—the truck show of seventy-odd makes, or the passenger display of eighty-four makes—would by itself be larger than any preceding show; and in addition 296 markers of accessories will exhibit at both shows.

Besides new and graceful originalities of body and chassis design, will be seen at the Grand Central Palace, for the first time many new mechanical improvements and cunning efficiency devices perfected by automotive engineers to save the motoring public's time and money, and to make motoring a still greater convenience and pleasure. These improvements have been achieved in spite of the immense post-war demand for all makes of automobiles. The result is that there will be a type of car for every individual taste and pocketbook.

Small Changes Attract.

In looking over the new productions one is impressed with the great attention to the smaller items of equipment, to such things as doors and door handles, cowl boards, instruments and fendering. Changes of this sort are not costly and are made much more easily than one involving the making of a new expensive die. In the desire to give the car a semblance of newness the body has been attacked and there is a bewildering array of "conceptions."

For the most part the designers have adhered to the basic lines shown last year in such numbers. This body has a high hood, usually with an angle at each side, the line of the angle meeting the top edge of the body. Hoods have more louvres, windshield supports are more substantial and shields are much in evidence and a few concerns have taken up small built-in side pieces attached to the windshield. This form will undoubtedly be standard equipment in a few years.

The Palace will surpass its own record as to pleasing novelties of decoration. Garlands of smilax and greens will bring the scheme into harmony with the holiday feeling and suggest the approach of spring. At the entrance the incomer's first glimpse of the interior will be through a frame of bay trees and floral masses.

alace Splendidly Decorated.

Each exhibitor's display will be enclosed by a white railing supported by white posts capped with brown. The big windows that light each of the four floors are curtained with especially designed fabrics. But the "piece de resistance" of setting will be the tapestry panels, set at regular intervals along the walls. They depict fanciful scenes of English country life, done in the old English manner. They bear coats-of-arms, and at the top is imprinted the name of the nearest exhibitor.

The makes of cars exhibited are: Holmes, Templar, Cleveland, Allen, American Beauty, Anderson, Apperson, Auburn, Biddle, Briscoe, Buick, Cadillac, Case, Chalmers, Chandler, Chevrolet, Cole, Columbia, Comet, Commonwealth, Crow-Elkhart, Davis, Detroit-Electric, Dixie-Flyer, Dodge Brothers, Dorris, Dort, Elcar, Elgin, Fist, Fergus, Franklin, Grant, Haynes, Hollier, Hudson, Hupmobile, Jackson, Jordan, King, Kissel Kar, Kline Kar, Lexington, Liberty, McFarlan, Maibohm, Marmon, Maxwell, Mercer, Metz, Milburn Electric, Mitchell, R. & V., Monitor, Moon, Nash, National, Oakland, Oldsmobile, Pontiac, Overland, Owen-Magnetic, Packard, Paige, Paterson, Peerless, Pierce-Arrow, Premier, Reo, Roamer, Saxon, Sayers, Scripps-Booth, Standard, Stanley, Stearns-Knight, Stephens Six, Stevens-Duryea, Studebaker, Shutz, Velie, Westcott, Willys-Knight, Winton.

S. A. Miles is manager of the National Automobile Shows; this show being given under the auspices of the National Automobile Chamber of Commerce. The committee in charge of the passenger model display is as follows: John N. Willys, Willys-Overland Company, chairman; H. G. Root, Westcott Motor Car Company; Harry M. Jewett, Paige-Detroit Motor Car Company.

Show Has Social Aspect.

Show week will be sprinkled generously with social affairs and important business conferences between automobile men and members and representatives of associations allied with the automotive industry. On Monday, January 5, the Rubber Association of America will dine at the Waldorf Hotel. The annual dinner of the National Automobile Chamber of Commerce will be given on Tuesday, January 6, at 7 o'clock, at Hotel Commodore.

Wednesday, January 7, will be a busy day with a luncheon and meeting of the National Automobile Show Managers' Association at 12:30; a luncheon of the professional session of the Society of Automotive Engineers at 1 o'clock; the twelfth annual banquet of the Motor and Accessory Manufacturers' Association in the grand ballroom of the Hotel Commodore at 7:30, and carnival night of the Society of Automotive Engineers at 9 o'clock at Hotel Astor. The Society of Automotive Engineers will have a luncheon on Thursday, January 8, at 1 o'clock and its annual banquet at Hotel Astor that night at 7.

These organizations will also hold numerous business and technical sessions during Automobile Show Week.

The truck display floor at the Eighth Coast Artillery Armory is so large that workmen who laid the new concrete floor for the show rode from one part of the armory to the other on bicycles.

Transportation problems equally vital to farmer, business man, truck owner and operator will be discussed and solutions suggested at the Highway Transport Conference of national authorities on trucks, highways and transportaion, to be held in conjunction with the motor truck division of the show.

The inaugural session of the conference will take place on the main floor of the armory on Saturday evening at 815:. This auditorium is in the same huge room as the trucks, one corner being partitioned off and roofed over. Seating facilities for one thousand are provided. Conference sessions will be held twice daily beginning Monday, January 5. Afternoon sessions begin at 2:15 and evening sessions at 8:15, and are open to the public.

To Improve Truck's aine.

It is the aim of the highway transport conference to drive home to motor truck dealers and operators, and through them, to the business man and general public as a whole, the clear-cut understanding of the use of motor trucks as the cheapest, quickest and most convenient method of transportation; and to represent truck haulage as an indispensable supplement to, instead of a competitor of, the railroad freight train.

Particularly interested in the exposition of these points will be those whose home regions could be benefitted immediately by the establishment of new motor express and passenger routes. The experts responsible for much of the post-war expansion in motor transportation of goods and passengers, are now emphasizing the fact that buyers and sellers of trucks are dealing primarily in transportation; and that increased transport facilities are keys to part of the problem of reducing the high cost of living.

Revealing light would be thrown on the reasons for high living costs in the metropolis, according to one expert, if figures were to be compiled showing what proportion of farm product grown within 100 miles of New York has been shipped to the city during the last ten years, and what proportion was wasted by decay owing to the lack of shipping accommodations.

All About Trucks.

The chief subjects to be covered by the speakers during afternoon sessions are: Monday, "Merchandising the Truck;" Tuesday, "Improving the Laws Regulating Trucks;" Wednesday, "Selling Trucks;" Thursday, "Manufacturers' Service to Dealers and Customers;" Friday, "Selling Motor Transportation;" Saturday, "Highways and Motor Transport;" during sessions, Monday, "Motor Transportation of Passengers;" Tuesday, "Increasing Truck Efficiency and Cutting Trucking Costs;" Wednesday, "The Rural Motor Express;" Thursday, "Aids to Motor Truck Efficiency;" Friday, "Motor Truck and Railroad Freighting." The highway transport conference is under the direction of John R. Eustis. All sessions will be illustrated by stereopticon and motion pictures and motion picture shows will show each session.

Taking up nearly all of the 180,000 square feet of new concrete floor at the armory the 70-odd makes of trucks and the numerous exhibits of accessories will afford material illustrations of practical points emphasized during the conference. These exhibits with the settings-forth given them by the big armory and its generous decorations will be a striking spectacle. From the ceiling, 110 feet high, to within a few feet of the floor the decoration will be in yellow and green, made up of 30,000 yards of bunting, weighing 17,500 pounds. The wide strips of yellow and green, spring's colors, will give the show a cheery atmosphere that will dispel even the gloom of a gray day. Of the 180,000 square feet of floor 120,000 feet will be covered with linoleum.

For some there will be a romantic touch in knowledge of the fact that the site of the armory was in years gone by occupied by the Jerome Park racetrack, where many a turf classic drew 10,000 or more spectators at a time when horse-power and shoe-leather were the only transit facilities available between the city and the park.

Many Makes on Exhibition.

The following makes of trucks will be shown: Acason, Acme, Ace, Armleder, Attlebury, Autocar, Bethlehem, Brockway, Clyesdale, Commerce, Corbitt, C. T. Day-Elder, Defiance, Denby, Diamond T, Dodge Brothers, Dorris, Federal, F. W. D., Garford, Gramm-Bernstein, Graham, Huffman, Hurlburt, Indiana, International, Jackson, Jumbo, Kelly, Kissel, Koehler, Macear, Master, Maxwell, Nash, Oldsmobile, Oneida, Packard, Paige, Pierce-Arrow, Rainier, Reo, Republic, Rowe, Sandow, Sanford, Schact, Schwartz, Selden, Standard Sterling, Stewart, Sullivan, Tower, Trailmobile, Transport, Three Point, Triangle, Union, Velie, Vim, Walker, Walter, Ward, Ward La France, Wilson, Winther, Keystone.

Not only will the truck exhibit give a practically complete cross-section of the truck industry of the nation, but every conceivable accessory to trucks will be shown, spare parts, trailers, bodies, efficiency-increasing appliances—representing all of the ramifications of the industry.

S. A. Miles is manager of the National Auto Shows, and the committee in charge of the motor truck section is as follows: M. L. Dulcher, chairman, Federal Motor Truck Company; A. J. Whipple, Diamond T Motor Car Company; David Ludlum, Autocar Company.

New Use for Old Files.

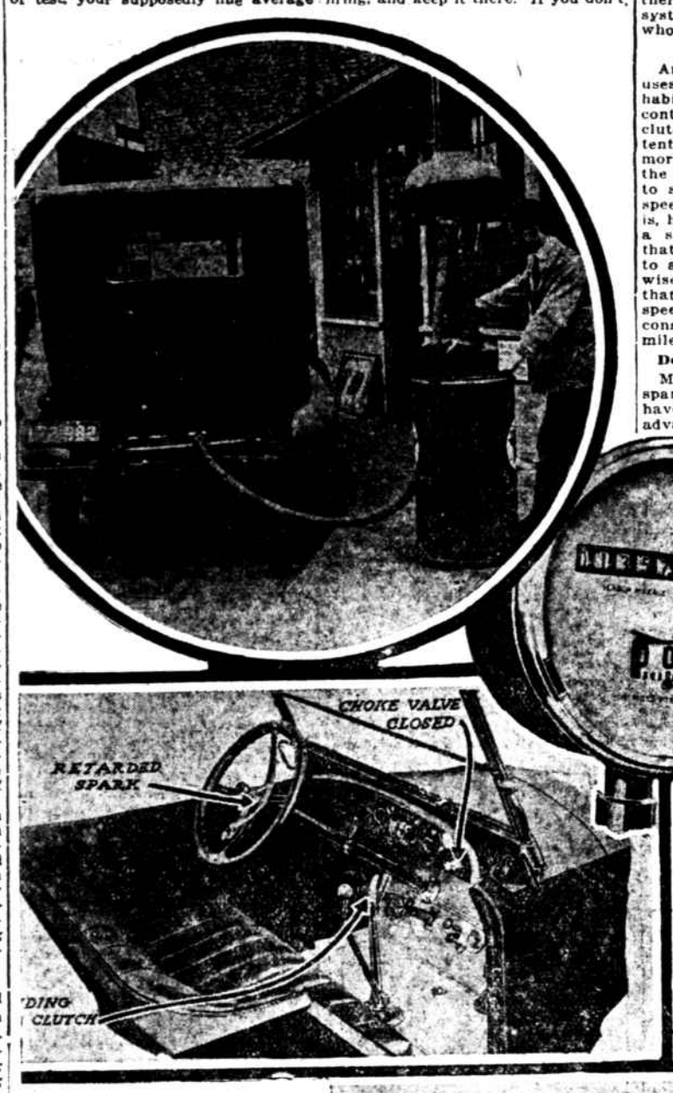
Frequently it is necessary for the car owner who does his own repair work to file a piece of cast iron that has been subjected to friction and so has acquired a glaze or skin. The best way to get through this skin is to use the edges of an old file. If a new file is used on this sort of surface it is likely to be ruined.

About Your Automobile

By JULIAN CHASE

Formerly Editor of "Motor," "Horseless Age," etc.

How many miles do you get from a gallon of gasoline? If you fill up the tank, run 100 or 200 miles with only a couple of stops, and then figure it out, you get one result. If you measure the quantity used in a month or a week and divide it into the number of miles run up on the total register of your odometer, you get a result that is quite different. Nine times out of ten, after the latter kind of test, your supposedly fine average



determined by an ideal performance is all shot to pieces, as it were, and you find that what you are really getting in miles per gallon is much less than it ought to be.

There is only one way in which to find out what your real miles per gallon average is, and that is to keep track of all gasoline poured into the tank and of all miles turned by the tires. Do that, not for a day, but for a month, and you may learn something that will do you good.

Many things affect the results obtained by a test of this kind, for there are many things in the adjustment and condition of a car and the manner in which it is driven that increase gasoline consumption and thereby decrease the miles per gallon. Here are some of them. They all can be prevented or avoided. They all cost you money and give you nothing for it. Are they worth while? We say not.

Speed Is Expensive.

One thing is high speed. Fast running, that is, traveling at thirty miles or more eats into the gasoline supply faster than the miles are run up on the odometer. Most cars are so geared that when going along at between twenty-two and twenty-five miles per hour their motors are running at the speed of greatest economy. There are a whole lot of other reasons for not running fast, but let's leave them for another time.

Close the Choke Valve.

As we have started with the gasoline consumers of car operation, let's take another one. Do you ever run your miles-gas average will be materially lowered.

Even with starters and everything on all cars today, we still see many of them standing with their motors running idle. The gasoline indicator in the tank is working in such a case, but the odometer isn't. Why do it?

When the Engine Is Too Cold.

In hot weather there's no danger from the following, but in the cool fall and colder winter days now with us, there is. When an engine is cold, not so cold that it shivers, of course, but colder than it should be, its appetite for gasoline increases. The reason for this is that the absence of the required amount of heat to vaporize the gasoline thoroughly necessitates the feeding of more gasoline than would normally be required in order that a sufficient quantity will be vaporized and mixed with the air drawn in through the carbureter to form an explosive mixture.

Condensation takes place as the gas passes from the mixing chamber of the carbureter to the combustion chamber of the engine with the result that an over-rich mixture must be formed primarily. It's like running with the choke valve closed, and it has the same effect on the miles per gallon average.

The remedy is, if your car hasn't a thermostatic control in the water system, to use a cover over the whole or part of the radiator.

Don't Be a Clutch Rider.

Another fault in driving which uses up gasoline unnecessarily is habitual clutch riding or driving continually with the foot on the clutch pedal. By doing this you intentionally or unintentionally are more or less constantly disengaging the clutch and permitting the car to slow down and the engine to speed up. The worst of the practice is, however, that it tends to develop a slipping clutch which, in cases that are at all bad, means shifting to a lower gear than would otherwise be necessary on many hills and that in turn means higher engine speed in proportion to car speed and consequently more of a gallon to the mile.

Don't Run With Retarded Spark.

Many cars now have automatic spark advance. Some do not. Others have what is called semi-automatic advance in that the spark lever is set by hand to either of two positions, one for starting and the other for running, after which the advance and retard are cared for automatically Running on a retarded spark increases gasoline consumption. The spark must be kept advanced to the fullest possible extent. Here's just one reason for it: Say you want to run at twenty-five miles per hour. Your spark is fully retarded. At the throttle position, which would give you your desired speed with the proper spark advance, you are getting, we will say, but twenty-two miles per hour. To get the other three miles per hour you give her more gas and you also bring down your average miles per gallon by that kind of driving. Proper spark advance with no more gas would give the extra speed at no more cost.

A retarded spark causes overheating, stimulates carbon formation and indirectly decreases the economy of the car in other ways. Keep the spark advanced.

Faults in the Car Itself.

So much for driving and car operation. Let's look now at the condition of the car itself as it affects the possible miles that are poured into it compared with the actual miles got out.

We can say first, that anything which tends to reduce the power of the motor, or its ability to deliver its full power, at the same time reduces its thermal efficiency, as the engineers call its capacity for turning the heat units in the gasoline into useful work.

Carbon in the cylinders and on the pistons causes knocking and makes it impossible to obtain the engine's full power with the result that more gear changing must be indulged in and a wider opened throttle used for a given or desired speed. Both of these mean more gasoline for each miles traveled.

Piston Rings, Valves and Lost Compression.

Leaky piston rings and leaky valves mean lost compression and consequently reduced power with increased gasoline consumption for the same results in car speed and hill climbing. If, with good compression, your car will take a certain grade on high at twenty miles per hour at half throttle and with poor compression she needs full throtle to do the same trick, the gasoline bill goes up while the mileage remains the same. Good rings and tight valves pay for themselves in miles per gallon of gasoline.

And then there's valve adjustment. Sometimes when you attempt to take a tap out of a valve tappet you get things too tight. You don't allow sufficient clearance between the tappet and the end of the valve stem. You are more likely to do this if you make the adjustment when the engine is cold. When this happens the valves affected do not seat properly and compression is lost. A proper adjustment will enable them to seat as they should and save gasoline.

Do Your Brakes Drag?

Do you throw off the emergency completely after each stop? No doubt you think you do, but it's a good idea to give the lever an extra push once in a while to be sure that the brakes are entirely free. A little drag on them will make a lot of difference in the power required to drive the car. It's like going up hill all the time. It's not good for the brakes and it eats up gas. Be particularly careful about this just after your brakes have been relined.

Carbureter Adjustment.

Of course, the adjustment of the carbureter is the most important factor in obtaining gasoline economy. Adjusting a carbureter is a job for an expert, and it pays to have a real expert do it. Nowadays it is not required often. Carbureters stay adjusted better than they did, but even so you want to be sure that yours is right, and if you are not qualified to do the adjusting yourself, have someone who is look at it if there is evidence in the form of excessive gasoline consumption, that all is not as it should be. It is safe to say—we'll whisper it for we do not want to encourage tinkering—that most cars would not only stand a finer adjustment of their carbureters, but would run much better for it. Phew! how some of the many bum mixtures that we run up to and overtake in a day's journey do smell! That's good gasoline going to waste.

Look After the Leaks.

And here's something so stupidly simple and so simply stupid that you never thought of it in this connection. How can you get the most miles out of the gasoline you buy if you let a lot of it drip away through leaks in the piping and at the carbureter? Some cars are run only on Saturdays and Sundays. During the rest of the week a good deal of the gasoline in their tanks drips out onto the garage floor. That which is lost costs as much as that which gets to the engine, but it doesn't get you anywhere.

BUREAU CHIEF'S CAREER VARIED

L. M. Estabrook Advanced From Farm Laborer to Present Position.

"That the motor truck rendered invaluable service for municipalities during the recent coal strike was only another example of the unusual dependability, economy and adaptability of the motor truck in meeting unusual transportation demands," says G. A. Kissel, president of the Kissel Motor Car Co.

"In the Middle West quite a few of our distributors wrote us that the motor truck took the place of the railroad locomotives in helping move freight cars loaded with coal from nearby mines and shipping points up to the yards of the local electric light, gas and water pumping stations, to provide heat to the municipal and industrial buildings.

"I, myself, noticed in the daily papers at the time, how when different switchmen's unions refused to move freight cars loaded with coal mined by volunteers, motor trucks stepped into the breach and kept up the supply of the precious fuel at a time when no other motive power was available.

"If these motor trucks had not proven equal to the job, many additional hundreds of thousands of employes, as well as scores of industries would have had to shut down.

"Owing to the fact that the motor truck did not employ coal as a source of its motive power, made their operation economical and efficient and did not use up fuel that could have been used in any way by industries or municipal buildings.

Burleson Shows Value Of Parcel Post Trucks

"According to Postmaster General Burleson, the use of more motor trucks on parcels post routes will prove an excellent means of reducing living costs in the cities," says W. L. Kissel, secretary and treasurer of the Kissel Motor Car Company.

"Mr. Burleson has not only urged Congress to provide the necessary equipment for such motor parcels post expansion, but claims that they will, in addition, show a profit. Nine such routes between Washington and Philadelphia have been established during 1919.

"Without a doubt this recognition by a prominent government official is a result of the adaptability and the way the motor truck has helped the government meet the transportation requirements at a time when the country's transportation equipment proved unequal to the demands made upon it."

Cinders Improve Garage Floor.

The average car owner may not know that a layer of cinders six inches thick makes a very satisfactory floor for the home garage. The cinders should be thoroughly tamped down, a hose being used to wet them down during the operation. This floor absorbs grease, oil or gasoline that may leak out of the mechanism and it is, moreover, practically dustless.

NEW YEAR TO SHATTER RECORD IN AUTOMOBILE PRODUCTION

May Reach 2,000,000 Passenger Cars and 300,000 Trucks—War Lessons to Aid.

The passing of 1919 will have recorded more changes in the automotive field vitally affecting its growth, its financial status and the quality of its products than has been experienced at any time since the beginning of the industry.

Just before the close of the war, automobile manufacturing was fast approaching a standstill. The signing of the armistice, November 11, 1918, put the brakes on what would soon have been a complete shutdown of every plant producing automobiles. With the gradual completion and elimination of war contracts in the various automobile plants, attention was again turned to producing cars which were discontinued, or on which production had been curtailed during the war period. At the same time, practically all manufacturers were planning on new models to offer the public for the year 1920.

The low production early in the year 1919, with the rapidly pyramiding demand for cars, on the part of the public, placed a tremendous load on the manufacturers. They not only had to face a shortage of material, but a growing unrest on the part of labor made it exceedingly difficult to get producing organization lined up.

The year 1919 has done much to prove to the automobile and truck assemblers the value and importance of having as their sources of supply, reliable and progressive unit makers. On every hand it was demonstrated that to increase car production was a simple matter, but that to increase the production of units was a task heretofore not appreciated. Unit manufacturers were compelled to purchase additional machinery and to expand their plants, while they were at the same time finishing up war contracts. Remarkable strides have been made by the motor and accessory manufacturers in helping the car and truck manufacturers to get back into business.

Auto for Every Fifteen Persons.

In the year 1920 there will probably be an automobile for about every fifteen persons in the United States. There will be nearly eight million power driven vehicles, including both passenger and commercial cars, in actual use by the dawn of the New Year. It is likely that the production of passenger cars for 1920 will near the 2,000,000 mark, while the output of commercial vehicles will be about 300,000.

One of the marked effects of the war has been to standardize automotive power and transmission units. More consideration has been given the designing of motors to handle low grade fuels than ever before. On the whole, the quality of cars and trucks for 1920 will be much superior to those produced in the past. While it is true that the prices will be higher, this is not due to increased cost of material alone.

Better parts of more costly design will be used throughout.

The tremendous demand for automobiles, following a shutdown of the industry during the war, showed that the unit manufacturer is really the greatest business ally of the car builder. Had the majority of car manufacturers been producing their own units, instead of purchasing them from highly specialized organizations, car production would today have been at least a year behind. Severe losses would have been sustained by many car and truck producers were it not for the balancing effect that the motor and accessory manufacturers were able to give them in the way of changing schedules, both increasing and decreasing, according to the rapidly changing situation.

Due to the fact that the motor and accessory manufacturers had a number of outlets for their parts, they were able to lend the greatest co-operation to the automobile producers—co-operation which was very needful and which vitally affected the continuance of many organizations. The automobile industry has learned that it must figure further ahead for its

CONTINUED ON PAGE NINE.